

REMARKS

Claims 2-7 are all the claims pending in the application. Claims 3-5 are withdrawn from consideration. Claims 2 and 7 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Claims 2, 6, and 7 are rejected under 35 U.S.C. § 102(b) as being anticipated by Asano.

Rejection under 35 U.S.C. § 112, second paragraph

Claims 2 and 7 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

With respect to claim 2, the Examiner states that claim 2 recites ‘an elastic member’ in line 2. This appears to be a double inclusion of the ‘elastic member’ recited in parent claim 6, line 4. *See Office Action, numbered paragraph 4.* In response, Applicant amends claim 2, as indicated herein.

With respect to claim 7, the Examiner states that “claim 7 recites the limitation ‘the nozzle opening side’ in [line] 6. There is insufficient antecedent basis for this limitation in the claim.” In response, Applicant amends claim 7, as indicated herein.

Claim Rejections under 35 U.S.C. § 102(b)

Claims 2, 6, and 7 are rejected under 35 U.S.C. § 102(b) as being anticipated by Asano.

To support this rejection, the Examiner simply repeats the arguments made in the previous Office Action. Further, in the *Response to Arguments* section, the Examiner states:

“ ... the O-ring of Asano, in functioning to seal the fuel injector, contacts the fuel. The elastic properties of the O-ring inherently functions as a buffer portion, which also appears to be the case in applicant's claimed invention. An O-ring is understood by one of ordinary skill in the art to possess elastic properties. The O-ring faces and contacts a fuel passage (figure 1, t2). This also appears to be the case in applicant's claimed invention as shown in figure 1 which shows rubber ring 18 between sleeve 17 and core 4. *See Office Action, page 4.*

The Examiner also asks, “If fuel does not come into contact with the O-ring, then why is the O-ring required to prevent leaks in the device of Asano?”

In response, Applicant respectfully submits that the O-ring (39) of Asano is merely a sealing member, but it does not function as a buffer member. That is, the O-ring of Asano may prevent leaks, but it does not function as a buffer portion that dampens a change of fuel pressure caused by valve bounce when the needle is closed, as described in claims 6 and 7.

Further, Applicant submits that O-ring 39 has a very small contact area, and therefore it is impossible for the O-ring to generate any effective damping effect. On the other hand, the buffer portion of the present invention has a large diameter which allows it to function as a buffer member and a sealing member. Thus, the buffer portion of the present invention is quite different from the O-ring (39) of Asano. Further, as the Asano O-ring is not disclosed as having any dampening function, the Examiner's anticipation rejection is inappropriate in any event.

Therefore, for at least the above stated reasons, Applicant submits that claims 2, 6, and 7 are patentable over Asano under § 102.

Further, with respect to claim 2, Applicant submits that Asano does not teach or suggest an elastic member being provided between a sleeve and a core, as described in claim 2. Nowhere does Asano show an O-ring between a sleeve and a core. *See Asano, Figs. 1 and 2.* Therefore, for at least this reason, Applicant submits that claim 2 is patentable over Asano.

Amendment Under 37 C.F.R. § 1.116
U.S. Appln. No. 09413,348

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,



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APPENDIX
VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims are amended as follows:

2. (Four-times Amended) The fuel injection valve according to claim 6, wherein ~~an~~ said elastic member is provided between a sleeve and said core in order to form said buffer portion, said sleeve being disposed between a core and a valve holder of the solenoid.

6. (Twice Amended) A fuel injection valve for opening and closing a needle valve by driving an armature with a solenoid comprising:

a buffer portion ~~for~~ damping a change of fuel pressure caused by valve bounce when the needle is closed, said buffer portion being an elastic member disposed at a position at which said buffer portion faces and contacts a fuel passage located at an upstream side with respect to an end face of said armature located on a side of a nozzle opening side.

7. (Twice Amended) A fuel injection valve for opening and closing a needle valve by driving an armature with a solenoid, comprising:

a buffer portion ~~for~~ damping a change of fuel pressure caused by valve bounce when the needle is closed, said buffer portion being an elastic member disposed at a position at which said buffer portion faces and contacts a fuel passage located at an upstream side with respect to an end face on ~~the~~ a nozzle opening side of said armature.